

# B R E V I O R A

## Museum of Comparative Zoology

CAMBRIDGE, MASS.

5 APRIL, 1968

NUMBER 282

### THE EXTINCT BABOON, *PARAPAPIO JONESI*, IN THE EARLY PLEISTOCENE OF NORTHWESTERN KENYA

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Among the fossils collected during 1966 in the early Pleistocene sediments of the Kanapoi area, southeastern Turkana (Patterson, 1966), is a specimen of a small baboon. The surface find of a fragment of a right horizontal ramus with  $M_{2-3}$  prompted excavation at the spot and sifting of the slope debris. No parts were found *in situ* but a number of fragments were recovered from the slope and several of these fitted together to form a partial mandible. Good contacts are present from the symphysis back to the base of the ascending ramus on the right side. The bases of the incisors and canines and the anterior root of the right  $P_3$  are preserved in the symphysis; complete or nearly complete teeth present are the left  $P_4$ ,  $M_1$  and  $M_3$  and the right  $M_{2-3}$ . The specimen bears the field number 122-66K, and was found by Mr. Roger C. Wood in the drainage of the Kikimon, a dry wash east of the Kanapoi and, like it, draining into the Kakuryo. All fragments were found within a small area, which, together with the gentle nature of the slope, suggests that the fossil may not have moved far from its burial place.

As is shown by the sizes of the incisors and canines relative to the cheek teeth and by the marked overlap of the anterior root of  $P_3$  along the posterolateral face of the canine, the specimen is certainly a male. It agrees so closely with specimens of *Parapapio jonesi* Broom from South Africa that, if Freedman's (1957, 1960) specific distinctions are accepted, there can be no doubt as to the identification.

Freedman has discussed the structure of this and other species of *Parapapio* in considerable detail, which makes it unnecessary to do more than comment on a few points. Curiously enough, the new specimen has the most complete symphysis of any male individual

of *P. jonesi* yet collected. The anterior surface is not steep, forming an angle of approximately  $45^\circ$  with the lower border of the horizontal ramus. The two ridges that converge upward toward each of the median incisors are not very prominent; they enclose a shallow, median depressed area that extends dorsally from the foramen symphyseosum. Between the posterior portion of the ridge, below, and the anterior alveolus of  $P_3$ , above, is a small,



Fig. 1. *Parapapio jonesi* Broom. Field no. 122-66K. Dorsal view of incomplete mandible of male.  $\times 1$ .

rather rugose depression. Apart from this, the anterior surface is only slightly roughened. The incisal shelf slopes very gently downward from the incisor alveoli to a point opposite about the middle of  $P_3$ . The symphysis terminates at the level of the anterior end of  $P_4$ ; there is no mental spine. The ascending ramus arises a little

behind  $M_3$ . The lateral face of the horizontal ramus is very slightly concave beneath  $M_2$  and the anterior half of  $M_3$ , but neither here nor in the portion of the bone beneath the left  $P_4 - M_1$  is there any delimitation of a mandibular fossa as such. The teeth preserved call for no special comment.

Measurements (in mm)

	C	$P_4$	$M_1$	$M_2$	$M_3$
Length (mesio-distal)	6.3	6.4	8.2	10.4	12.7
Width	10.0	6.2+			
Width, anterior			7.3	8.8+	9.6
Width, posterior			7.1	9.1	8.6
Width, hypoconulid					5.0
Depth of ramus posterior to $M_2$	29.1				

All measurements have been taken in accordance with Freedman's methods. Dimensions of the Kanapoi specimen fall, or, in the case of the widths of  $P_4$  and  $M_2$ , presumably fell, within the observed ranges for males of his sample of *P. jonesi* (1957, tables 6b, 6d) in all cases but three. These, the anterior and posterior widths of  $M_1$  and the length of  $M_3$ , fall within the observed ranges for females. As he stresses, the ranges of the two sexes overlap broadly for  $P_4 - M_3$  in the genus. His samples for males, furthermore, are small, numbering only 5, 4 and 3 in these cases.

*Parapapio* is characteristic of the older part of the South African Pleistocene sequence. *P. jonesi* is well represented at Sterkfontein

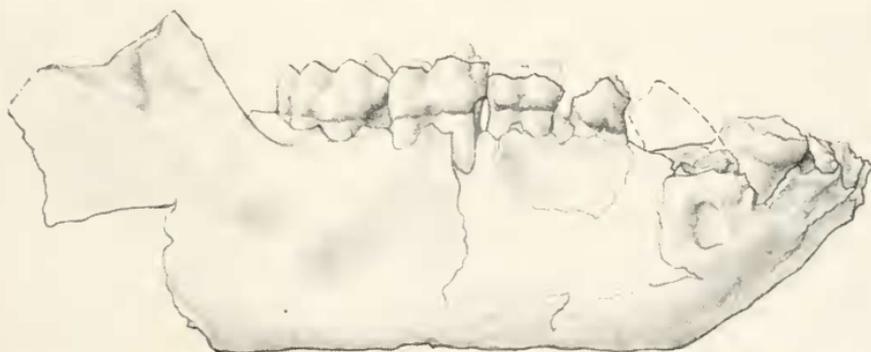


Figure 2. *Parapapio jonesi* Broom. Field no. 122-66K. Right lateral view of incomplete mandible of male. The ramus fragment with  $P_4 - M_1$  has been reversed from the left side.  $\times 1$ .

and Makapan, by 24 and 15 specimens, respectively, and one individual from Taung has been referred to it. The only specimens of *Parapapio* recorded from Swartkrans and Kromdraai are five individuals, 3 and 2, respectively, of a small form, and these are fragmentary. Freedman placed them with some hesitation in *P. jonesi*, pointing out that better material might in future require their separation. Two partial female mandibles from Swartkrans have "fairly large and quite deep mandibular fossae," a feature conspicuously lacking in those from the earlier deposits. The Kanapoi specimen agrees with the earlier South African material and adds one more to the small list of species in common between the early Pleistocene of eastern and southern Africa.

The field work was supported by National Science Foundation Grant no. G.A. 425. The drawings are the work of Mr. Arnold D. Clapman.

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(Received 19 June 1967.)